## TRANSPORTATION

Transportation has always been a defining factor in the historical development of the Takoma community. From its origins as a B & O Railroad village to its modern day role as a transit-oriented, urban mixed use neighborhood, Takoma's economic health and overall quality of life have been closely linked to the community's transportation facilities. As the Takoma community advances plans for continued development and revitalization, its transportation system presents both obstacles and opportunities for near-term and long-term economic viability.

The existing road system through Takoma, largely designed for local needs, is now accommodating substantial pass-through commuter traffic from outside the area. The resulting congestion presents challenges for the establishment of viable businesses and produces negative side effects on surrounding residential neighborhoods. The roots of this congestion go far beyond Takoma and will require long-term regional solutions. However, near-term actions can and should be undertaken to better manage traffic conditions within Takoma's core area to help ensure that new investment and revitalization in the local community can be advanced.

While traffic issues present significant challenges for Takoma, the community's transit facilities are a wonderful asset that can be leveraged to overcome vehicular congestion and attract new investment. The Metrorail station and its associated bus services present the opportunity to continue with revitalization efforts and new projects in Takoma even as near and long-term actions are initiated to deal with traffic concerns. The following transportation assessment and strategies are intended to set the stage for such traffic solutions while ensuring that transit services are maintained and strengthened.

# **Transportation Assessment**

To assist with development of practical revitalization strategies for the Takoma Central District, the planning team conducted a preliminary transportation assessment for the study area, including:

- Existing traffic performance in and around the Central District
- Projected traffic volumes from proposed Priority Redevelopment
   Sites in the Central District
- Existing and projected needs for transit services and facilities located in the Central District

This assessment helped identify issues related to Takoma's current roadway network and transit infrastructure. Key information from this assessment is summarized below.

#### Traffic Performance

In order to identify the most significant traffic problems affecting the Takoma Central District, a preliminary analysis of existing traffic performance in the district and surrounding area was completed as part of the planning process. This analysis reviewed peak hour traffic volumes to determine the current Level of Service (LOS) for the area's road system and identify the most significantly congested locations. The results of this assessment for three key intersections in the Central District's core area are summarized in <u>Table E</u> below. A LOS of A indicates free flowing traffic during peak travel times. A LOS of F indicates severe traffic congestion during peak travel times.

<u>Table E</u>

AM/PM Peak Hour Traffic Volumes & Levels of Service (LOS)

Intersection	AM/PM Peak Hour	AM/PM
	Traffic Volume	LOS
Carroll St/Eastern Ave/Willow St	1138/1206	C/F
Carroll St/Cedar St	992/1096	B/A
Blair Rd/4 <sup>th</sup> St/Cedar St/Carroll St	1794/1728	C/F

Source: Gorove/Slade 10/04/00

Within the Central District, the intersection at Blair Road and 4<sup>th</sup>/Cedar/Carroll Streets carries the greatest volume of peak hour traffic and, along with the Carroll Street/Eastern Avenue/Willow Street intersection at the DC/MD boundary, is one of the most congested points in the community's road system with LOS F during peak travel periods. This intersection will therefore be a primary focus for improvement in the transportation strategies that follow.

#### Traffic Volumes for Priority Redevelopment Sites

The plan's Land Use section identifies five Priority Redevelopment Sites that should be the focus of initial efforts to attract new investment in the Takoma Central District. To help understand the potential traffic impacts of development proposed for these sites, the planning team assessed the maximum likely amount of AM/PM peak hour vehicle trips that would be generated by the mix of uses described in <u>Figure L</u>. The results of this assessment are summarized in Table F below.

New development on the Priority Redevelopment Sites will generate additional vehicle trips in the Takoma Central District, although the traffic impacts of such development will be significantly mitigated by project phasing and transit's projected share of trips. The dispersal of the remaining trips throughout the area's road network, and potential impacts on the key intersections reviewed above, will require further area-wide analysis and specific assessments of projects on each site as they proceed through the District of Columbia's development review processes. However, given the broad scope and regional roots of

Takoma's traffic congestion discussed above, and the importance of attracting new investment to achieve community revitalization goals, the projected traffic volume from Priority Redevelopment Site projects should not be a deterrent to initiating strategies for their eventual development with preferred uses at projected intensities. Additionally, as discussed later in this section, the District Division of Transportation (DDOT) has committed to undertake a comprehensive transportation study to further analyze traffic issues affecting the Takoma community.

<u>Table F</u>
AM/PM Peak Hour Trip Generations for Priority Redevelopment Sites

			•	
Development	Туре	Maximum	AM Peak Hr	PM Peak Hr
Mix		Projected Size	Trips	Trips
Priority Site 1		Size		
Residential	townhomos	95 du	25	25
Residential	townhomes			
Subtotal	local retail	10,000 sf	0 25	26 51
			25	51
Priority Site 2  Residential		FO d	21	36
	apartments	50 du	31	26
Retail	local retail	10,000 sf	0	
Subtotal			31	62
Priority Site 3	onomt	FO -1	01	27
Residential	apartments	50 du	31	36
Retail	local retail	5000	0	13
Subtotal			31	49
Priority Site 4	1		1	
Residential	apartments	30 du	20	23
Retail	local retail	10,000	0	26
Office	general office	10,000	34	170
Subtotal			54	219
Priority Site 5	1		1	r
Residential	garden apartments	80 du	46	55
			1	T
Residential Subtotal		153	180	
Retail Subtotal		0	91	
Office Subtotal			34	170
% Trip Reduction due	Residential: 50%			
to Transit Station	Retail: 30%			
Proximity	Office: 20%			
TTOAIIIITY	OTTICE, 2070			
Residential Trip Total			77	90
Retail Trip Total			0	64
Office Trip Total			27	136
Grand Total			104	290

Source: Gorove/Slade (1/02) per standardardized vehicle trip calculation methodologies

#### Existing & Projected Transit Services & Facilities

Approximately 1.6 million riders exit the Takoma Metrorail station annually. At least 220 WMATA Metro and 325 Montgomery County, Maryland Ride-On buses pass through the station each weekday. Transit service begins as early as 4:30 am and ends as late as 2:00 am.

Metro and Ride-On buses currently use the existing Carroll Street entrance as the primary point of entry and exit to the Metro station site. Approximately 15-20% (48-65) of Ride-On buses use the existing access on Eastern Avenue, primarily for exit only. The station's bus facility currently includes nine bus bays for loading/unloading passengers, with Metro and Ride-On each using four bays and one bay not assigned. Most bus stacking/idling occurs on-site near the existing bus turnaround. Although Ride-On officially prohibits the practice, the agency's buses have at times been observed stacking and idling along Cedar Street on the eastern side of the station site.

Parking for transit users at the Takoma station is provided in a surface lot accessed from Eastern Avenue with approximately 158 spaces, including approximately 10 Kiss & Ride spaces. Permitted parking hours and durations are limited to discourage all-day commuter use. These restrictions were a result of strong citizen action during the station's design that was intended to strengthen the station as a pedestrian and transit hub rather than an automobile-oriented commuter station.

Future bus needs at the Takoma station have been confirmed with each transit provider during the planning process as follows:

- Metro does not anticipate the need for any additional bus bays or access to accommodate current and future bus service at the station, although some additional stacking/idling space is desired.
- Ride-On has requested from WMATA one additional bus bay and one stacking/idling space to accommodate current and future service to the station.
- Ride-On requires retention of a bus exit to Eastern Avenue to avoid costly bus rerouting from the station.
- The City of Takoma Park, Maryland has indicated that Prince Georges's County's "The Bus" service intends to initiate bus service to the Langley Park/Takoma Park area. However, Prince George's County has not determined actual bus routes and has not requested use of a specific WMATA Metro station. Ride-On has confirmed that such a bus route to the Takoma Metro station can be accommodated at Ride-On's assigned bus bays through schedule adjustments and will not require an additional bay.

### **Key Transportation Issues**

Based on traffic performance, field observations, and discussions with participants in the planning process, several key transportation issues were identified and are addressed as part of this plan. These include:

- Vehicular Circulation & Pedestrian Safety. The plan recognizes a need to improve key intersections and roadways that currently operate at capacity during the peak commuter hours and create significant congestion and safety issues. The improvements should include measures to mitigate commuter traffic congestion and should explore broader traffic calming opportunities for the neighborhood. The plan also recognizes an immediate need throughout the area for adequate sidewalks, improved pedestrian direction at the Metro station and better pavement markings and crosswalk delineation at major intersections.
- Parking. There is generally an adequate parking supply in the Central District, although its location and design does not effectively serve the community. Institutional peak hour usage from Strayer University causes parking infringements in the residential neighborhoods along Willow and Laurel Streets, located in the eastern section of the district. There is also a need to make parking more readily available and convenient for retail businesses on 4<sup>th</sup> and Carroll Streets. The parking facility at the Metro station site should also be relocated to a more strategic and convenient location to serve both commuters and retail shoppers.
- Metro & Ride-On Bus Service. Redevelopment planning must recognize that the primary function of the Metro station site is to provide transit services. Secondary functions accommodating the needs of the local business community or potential new development must be designed in a manner that continues to support current and future transit needs at the station. Even if redesigned to better accommodate new development opportunities, the current station site contains sufficient capacity to meet current and projected transit needs for Metrorail, Metro buses and Ride-On buses. In order to develop and use the Metro site most effectively, vehicular access should be separate from transit access, Metro and Ride-On buses should be required to use on-site boarding and stacking facilities, short-term curbside parking for kiss-and-ride functions should be provided and sufficient parking should be included to serve transit patrons, existing businesses and new development.
- Metropolitan Branch Trail. The Metropolitan Branch Trail is a regional bike path proposed to pass through the Takoma Central

District. The trail provides an opportunity for residents in the area to take advantage of this regional transportation and recreation resource and connect with other parts of DC and Montgomery County, Maryland. As the District Division of Transportation (DDOT) continues to develop the preferred alignment of the trail, proposed routes should be considered in light of the revitalization proposals included in the plan.

# Transportation Revitalization Strategies

The strategies recommended below respond to transportation issues and opportunities identified for the Takoma Central District:

1. Under DDOT direction and in partnership with a citizen transportation task force, initiate a comprehensive traffic study for the Takoma Central District and surrounding neighborhoods to identify methods for reducing adverse impacts from commuter/cut-through traffic, reducing congestion and improving parking and pedestrian safety. A major concern for the area and for communities throughout the city relates to encroachment of commuter-related traffic on neighborhood streets. As a supplement to this plan, it is recommended that a comprehensive, community-wide study be performed to identify how commuter-related encroachment can be reduced on the area's neighborhood streets.

This study should identify specific roads for accommodating major north-south and east-west through-traffic movements in the community. Guidelines should be established to identify streets eligible for traffic calming improvements. The study should be coordinated with the upgrading of the signal system to determine signal timings that would help facilitate traffic diversion strategies. The study's recommended actions should be consistent with DDOT and WMATA goals and guidelines for Metro station areas throughout the city. Coordination with neighboring communities will also be essential to generate consensus for needed changes to traffic patterns.

In anticipation of this plan recommendation, DDOT has already funded and scheduled the Takoma Transportation Study in fiscal year 2002. Up to \$200,000 has been budgeted for the study, which should be completed in six months. The study will examine existing traffic conditions in the proposed area and make recommendations to improve mobility, parking and traffic safety. The selected contractor will investigate current and future needs regarding vehicular, transit, pedestrian and bicycle mobility and safety and parking issues. Work will involve affected community stakeholders

to address their specific concerns and those identified in this plan. The contractor's recommendations will include short and long term strategies to improve neighborhood parking, address traffic management and infrastructure improvements to reduce congestion, especially during peak hours, provide adequate transit services, improve traffic and pedestrian safety and protect surrounding residential streets from traffic impacts.

Although major recommendations for transportation improvements in the Takoma area will be derived from the DDOT study, revitalization strategies in the Central District should be initiated as outlined in this plan. With much of Takoma's congestion generated by outside commuters passing through the community, efforts to enhance the quality of life for neighborhood residents can and should be advanced.

Pending the more detailed analysis to be conducted with the DDOT study, the Central District's planning team identified a range of additional strategies for addressing specific transportation issues. These strategies are reviewed below. I mplementation of these strategies will support and facilitate the continued revitalization of the Takoma Central District even as the more detailed DDOT transportation assessment is completed and acted upon.

2. Mitigate intersection and corridor congestion on Blair Road and Carroll Street. Based on DDOT's Classification of Roadways, there are two minor arterial roadways serving the plan area: Blair Road and Carroll Street. These streets have been identified as roadways that are to be maintained to serve significant traffic destined to and from this area and from one part of the city to another.

The traffic volumes through both of these corridors are high since they serve commuter traffic, Metro station traffic and local traffic in and through the Takoma community. As a result, the intersections at Blair Road and Carroll/Cedar/4th Streets west of the Metro station and Carroll Street/Eastern Avenue/Willow Street at the eastern gateway to the Central District operate at capacity during the peak commuter hours and lines of traffic hinder the progression of vehicles in both the Blair Road and Carroll Street corridors. In addition to heavy commuter traffic, significant delay in the Blair Road corridor can be attributed to its narrow two-lane cross-section, conflicting turns causing delays for through movements, and conflicts with pedestrian traffic headed to and from the Metro station.

Other intersections outside the Central District that contribute to the inefficiency of traffic through the Takoma community include those at Piney Branch and Blair Roads and Piney Branch Road and Eastern Avenue.

Several options are proposed to address the Blair Road and Carroll Street corridor congestion, including:

- Restrict peak period left turns from Blair Road to Piney Branch Road. Because of the existing narrow cross-section of Blair Road, turns performed at intersections along this corridor add to through delays, especially for vehicles waiting to turn left from Blair Road. An improvement to this situation would be to restrict all left turns from Blair Road to Piney Branch Road during the commuter peak periods.
- Reduce use of Blair Road as a commuter route. This can be achieved by modifying the signal timing at the intersection of Blair Road and Georgia Avenue that currently encourages left-turns southbound from Georgia Avenue onto Blair Road at the DC/Maryland border. Another measure that can improve Blair Road conditions would be to restrict left turns from Piney Branch Road southbound to Blair Road during the AM peak hour. These diversion elements would be geared to discourage Blair Road as a commuter route, but may create the undesired impact of diverting some traffic to local neighborhood streets.
- Improve traffic light coordination. As DDOT continues to upgrade the existing traffic signal system, it is recommended that the existing signal timing patterns along the Blair Road and Carroll Street corridors be reviewed and changed as needed to better coordinate the signals from intersection to intersection and to employ an appropriate signal timing diversion plan.
- Explore major design changes to the intersection of Blair Road and Carroll/Cedar/4th Streets west of the Metro station. Such changes should reduce the number of vehicular entry points into the intersection from the current five to four, and provide for better traffic signal efficiency, better pedestrian safety measures and new parking opportunities to support potential retail uses.

A preliminary design alternative for further study and consideration by DDOT is to modify 4<sup>th</sup> Street for southbound-only operation for one block between Blair Road and Butternut Street. This change will remove one approach from the intersection while still allowing vehicular circulation along 4<sup>th</sup> Street. A one-way 4<sup>th</sup> Street would also allow for approximately 20-25 short-term, angled parking spaces on at least one side of



Commuter traffic along Blair Road



Intersection of Blair Road/Carroll Street/Cedar Street/4<sup>th</sup> Street

the roadway to support adjacent retail uses in this key commercial area.

The one-way alternative for 4<sup>th</sup> Street will require the northbound routes of three existing Metro bus lines to be altered from 4<sup>th</sup> Street to Blair Road. Southbound buses will continue to use 4<sup>th</sup> Street. Metro is receptive to such a bus rerouting as long as any necessary reconstruction of the Blair Road/Butternut Street intersection is completed by DDOT to accommodate northbound left turns. Further study may also be required to determine the need for and feasibility of a new traffic signal at this location.

- 3. Improve pedestrian safety in the Takoma Central District with a coordinated program of physical improvements. An inventory of existing pedestrian facilities and observations of peak pedestrian movements through the study area have identified several pedestrian issues in Takoma, including the need for adequate sidewalks, controlled pedestrian activity at the Metro station, better pavement marking and crosswalk delineation at major intersection, and adequate timing for pedestrians to cross major streets. Proposed improvements include:
  - Construct and/or improve sidewalks in key locations:
    - Blair Road between Piney Branch Road and Cedar Street
    - Maple and Willow Streets south of Carroll Street
    - Sandy Spring Road near Aspen Street
    - Aspen Street under the rail line
  - Upgrade crosswalks with special pavement treatments at significant pedestrian crossing locations, including the intersection of Blair Road and Carroll/Cedar/4th Streets west of the Metro station and the intersection of Cedar and Carroll Streets east of the Metro station.
  - Revise signal timing to allow for safe pedestrian crossings at key locations, including the intersection of Blair Road and Carroll/Cedar/4th Streets west of the Metro station and the intersection of Cedar and Carroll Streets east of the station.
  - Develop a safe and appropriate design solution for the area under and adjacent to the Carroll Street Metro underpass to address mid-block pedestrian crossings and Metro patron drop off and pick up in this area.
- 4. Serve transit needs first and accommodate all Metro and Ride-On services on the Takoma Metro station site. Planning for the Metro station site must first accommodate the site's current and future transit functions, with the needs of the local business community and potential new development as a secondary



Drop off and parking along Carroll Street at the Metro station



Transit services at the Takoma station include Metrorail and Metro and Ride-On buses

consideration. In order to redevelop the Metro site effectively to serve confirmed transit needs, as well as achieve development goals and address community concerns, the following guidelines are recommended for the Metro site:

- Separate vehicular access from bus access.
- Provide sufficient bus bays and maneuvering space for current and projected Metro/Ride-On buses to board and stack on-site.
- Provide curbside areas for Kiss & Ride and Taxi functions, along with short-term retail parking.
- Provide sufficient and better-located on-site parking to accommodate both Metro patrons and retail customers.

To comply with these guidelines and accommodate the confirmed needs of each service provider, specific design solutions for the Metro station site are proposed and reviewed in the plan's Urban Design section that follows.

As the approval and redevelopment process for the Metro site evolves, it is important that interagency coordination is maintained between WMATA, Ride-On and DDOT, and is facilitated with a community committee to assist in the development approval process and the implementation of Metro site development guidelines.

It is also important for redevelopment of the Metro site to provide flexibility for the incorporation of the Metropolitan Branch Trail because of the trail's importance in providing an alternate means of connectivity to the Metro station. An example of such accommodation at a Metro station can be seen at the New York Avenue station currently under development.

- 5. Improve parking for neighborhood residents. Existing parking issues related to the Takoma area include institutional peak hour usage, parking enforcement and shared parking opportunities. As a Metro station community, residential permit parking has been instituted to prevent commuter parking in residential neighborhoods. It is important to stress rigorous enforcement as a mechanism to help protect parking for residents in the Takoma community. The effect of parking infringement is also related to institutional uses such as Strayer University located in the eastern section of the plan area along Willow and Laurel Streets. Parking restrictions should be extended later in the evening to protect residences in these areas from parking associated with these uses.
- Improve parking for local retail businesses. Approximately 20-25 additional parking spaces could be provided along 4<sup>th</sup> Street as part of the one-way southbound option previously identified. This parking,



4th Street retail parking

coupled with parking at the Metro site, which currently appears to be underutilized at times, can be promoted as additional parking for retail uses in the area. There are also approximately 12 private parking lots in the study area that can help address parking needs. However, because these lots are privately owned, their use for additional public parking for the community will require negotiation.

7. Support and incorporate Metropolitan Branch Trail options into all transportation improvements for the area to ensure good access and connections to this regional resource. The trail provides an opportunity for residents in the area to take advantage of this regional transportation and recreation resource and connect with other parts of DC and Montgomery County, Maryland. As DDOT continues to develop the preferred alignment of the trail, a number of route options have been identified as potential configurations for the trail through Takoma, as shown in <a href="Figure M">Figure M</a> below. All of the potential trail alignments originate south of Takoma at Union Station. The route options are provided here for information only and do not constitute an endorsement of any particular choice. A final decision on the preferred trail alignment will be made as part of a separate DDOT process to include community involvement and input.

Figure M
Metropolitan Branch Trail Route Options

